



**CLAIMS OF 09/889,245 SHOWING STATUS OF ALL CLAIMS AND AMENDMENTS
TO CLAIMS 1, 2, 7, 13, AND 15 SHOWN EXPLICITLY, CANCELLING CLAIMS 12
AND 14 AND ADDING NEW CLAIMS 25-27**

WHAT IS CLAIMED IS:

1. (Twice Amended) A probe for measuring tread depth, said probe comprising:

a housing having a window formed therein, said housing having a proximal end and a distal end;

range finding means for finding distance, said range finding means being carried within said housing and oriented so that said range finding means directs a beam of light through said window;

means for moving said range finding means parallel to said window;

means carried by said housing for gripping said housing;

tire-engaging means carried by said ~~proximal end~~ housing for engaging a side and two locations on a rolling face of a tire to provide a three-point contact for preserving the integrity of a line of reference to the tire defined by the movement of said range finding means; and

means carried by said housing and in operational connection with said range finding means and said moving means for sending distance data from said range finding means as said range finding means is moved parallel to said window while a plane of said window is parallel to a tangent of the tire rolling face where engaged by said tire-engaging means.
2. (Amended) The probe as recited in claim 1, wherein said housing has ~~an~~ a concave arcuate shape with opposing edges for engaging the rolling face at two locations to edge

~~formed at both said proximal end and said distal end to provide support~~ the housing on ~~for a~~
tire.

3. (Original) The probe as recited in claim 1, further comprising a communications port means carried by said gripping means for communicating distance data to a computer.

4. (Original) The probe as recited in claim 3, wherein said communications port means transmits distance data using an infrared transmission.

5. (Original) The probe as recited in claim 3, wherein said communications port means transmits measurement data using a radio frequency transmission.

6. (Original) The probe as recited in claim 1, wherein said gripping means is a handle carried by said proximal end of said housing.

7. (Amended) The probe as recited in claim 3, further comprising a handheld computer, said handheld computer being in electrical communication with said range finding means, and said handheld computer having a display and means for plotting distance data.

8. (Previously Amended) A probe for measuring tread depth, said probe comprising:
a housing having a window formed therein, said housing having a proximal end and a distal end;

range finding means for finding distance, said range finding means being carried within said housing and oriented so that said range finder directs a beam of light through said window;

means for moving said range finding means parallel to said window;

a handle carried by said proximal end of said housing; and

means carried by said housing and in operational connection with said range finding means and said moving means for sending distance data from said range finding means as said range finding means is moved parallel to said window.; and

communications port means carried by said handle for communicating distance data to a computer.

9. (Original) The probe as recited in claim 8, wherein said communications port means transmits measurement data using an infrared transmission.

10. (Original) The probe as recited in claim 8, wherein said communications port means transmits measurement data using radio frequency transmission.

11. (Original) The probe as recited in claim 8, further comprising tire-engaging means carried by said proximal end for engaging a side of a tire.

12. (Cancelled) The probe as recited in claim 8, wherein said window is positioned in contact with the tread of a tire.

13. (Amended) The probe as recited in claim 8, further comprising a handheld computer, said handheld computer being in electrical communication with said range finding means, and said handheld computer having a display and means for plotting distance data.

14. (Cancelled) The probe as recited in claim 8, wherein said gripping means is a handle carried by said proximal end of said housing.

15. (Twice Amended) A method for measuring the tread profile of a tire, said method comprising the steps of:

providing a handheld probe having means for engaging a rolling face and a side of a tire;

placing a the handheld probe in engagement with said rolling face and said side of a tire;

scanning said rolling face with said probe to determine the tread profile;

communicating said tread profile to a computer having a display; and

plotting the tread profile on said display.

16. (Previously Cancelled) The method as recited in claim 15, wherein said scanning step and communicating step is performed by a probe having a handle, said handle having a communications port that communicates said tread profile to said computer.

17. (Previously Cancelled) The method as recited in claim 15, wherein said tread profile is communicated to said computer using a transmission selected from the group consisting of infrared and radio frequency.

18. (Previously Cancelled) The method as recited in claim 15, wherein said scanning step is performed by a handheld probe.

19. (Original) The method as recited in claim 15, further comprising the step of determining whether the tread profile complies with the minimum allowable tread profile listed in governmental regulations.

20. (Original) The method as recited in claim 19, further comprising the step of predicting when the tire needs replaced to comply with the minimum allowable tread profile listed in governmental regulations.

21. (Previously Added) The method as recited in claim 15, wherein said method further comprises the step of providing a probe having a handle, said handle having a communications port that communicates said tread profile to said computer.

22. (Previously Added) The method as recited in claim 15, wherein said communicating step further comprises the step of transmitting said tread profile using infrared light.

23. (Previously Added) The method as recited in claim 15, wherein said communicating step further comprises the step of transmitting said tread profile using radio frequency electromagnetic waves.

24. (Previously Added) The method as recited in claim 15, wherein said scanning step further comprises the step of using a handheld probe for scanning said rolling face of said tire.

25. (New) A probe for measuring tread depth, said probe comprising:

a housing having a window formed therein, said housing having a proximal end and a distal end;

range finding means for finding distance, said range finding means being carried within said housing and oriented so that said range finding means directs a beam of light through said window;

means carried by said housing for gripping said housing;

tire-engaging means carried by said housing for engaging a side and two locations on a rolling face of a tire to provide a three-point contact for preserving the integrity of a line of reference to the tire defined by the movement of said range finding means;

means for moving said range finding means parallel to the line of reference; and

means carried by said housing and in operational connection with said range finding means and said moving means for sending distance data from said range finding means as said

range finding means is moved parallel to the line of reference while a plane of said window is parallel to a tangent of the tire rolling face where engaged by said tire-engaging means.

26. (New) The probe as recited in claim 25, wherein said range finding means measures distance to said tire face by triangulation.

27. (New) The probe as recited in claim 25, wherein said range finding means further comprises two sensors and a light source for directing said beam of light, said sensors located on either side of said light source.

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Applicant(s): TRACY, et al

Docket No.

29093-3

Serial No.
09/889,245Filing Date
10/10/2001Examiner
ALLEN, A.J.Group Art Unit
2855Invention: **HAND HELD PROBE FOR MEASURING TIRE TREAD WEAR**

I hereby certify that this **AMENDMENT, REQ FOR CONTINUED EXAMINATION, RELATED DOCUMENTS**
(Identify type of correspondence)

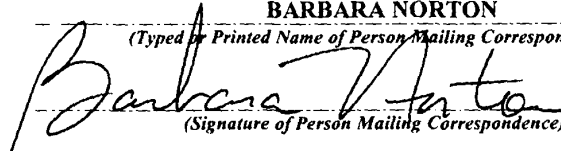
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